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1. A liquid crystal display device, comprising:
an upper electrode;
a lower electrode;
an alignment layer in contact with either of said upper electrode or said lower electrode to form a lower assembly and an upper assembly;
and
a liquid crystal display material, disposed between the upper assembly and the lower assembly;
wherein the upper assembly and the lower assembly are designed relative to each other, based on at least one surface potential measurement, to create a substantially predetermined surface potential difference between the upper assembly and the lower assembly;
such that an intrinsic DC offset potential in said liquid crystal display device is within a designed range.
2. A liquid crystal display device, as in claim 1, wherein material is selected for said lower electrode and said upper electrode, such that a surface potential difference between the lower assembly and the upper assembly, is adjusted and the intrinsic DC offset potential in said liquid crystal display device is changed.
3. A liquid crystal display device, as in claim 1, wherein material for said lower electrode is selected for the lower assembly, the material for said lower electrode having a measured surface potential and material for said upper electrode is selected for the upper assembly of said liquid crystal display device, the material for said upper electrode having a surface potential that is substantially similar to a surface potential of the material for said lower electrode.
4. A liquid crystal display device, as in claim 1, wherein at least one of said upper electrode and said lower electrode, is treated such that a surface potential

difference between the lower assembly and the upper assembly, of said liquid crystal display device, is adjusted and the intrinsic DC offset potential is changed.

5. A liquid crystal display device, as in claim 4, wherein, at least one of said upper electrode and said lower electrode is treated by firing in an atmosphere selected from the group consisting of H₂, N₂, and combination H₂/N₂.

6. A liquid crystal display device, as in claim 4, wherein at least one of said upper electrode and said lower electrode is treated by etching.

7. A liquid crystal display device, as in claim 1, wherein at least one of said upper electrode and said lower electrode is treated, such that a surface potential of at least one of said upper electrode and said lower electrode is changed.

8. A liquid crystal display device, as in claim 1, wherein passivation layer material is selected and disposed on at least one of said upper electrode and said lower electrode to form at least one of the lower assembly and the upper assembly wherein a surface potential of an assembly formed thereby is altered, such that a surface potential difference between the lower assembly and the upper assembly is adjusted and the intrinsic DC offset potential in said liquid crystal display device is changed.

9. A liquid crystal display device, as in claim 8, wherein the surface potential of the assembly formed thereby is altered, resulting in a decrease in the surface potential.

10. A liquid crystal display device, as in claim 8, wherein the surface potential of the assembly formed thereby is altered, resulting in an increase in the surface potential.

11. A liquid crystal display device, as in claim 1, wherein a passivation layer is selected from at least one of BCB, NHC, MgO, SiO₂, Al₂O₃, SiN₂, MgF₂, and

MgAl_2O_4 and the passivation layer is disposed on at least one of said upper electrode and said lower electrode to form an assembly, wherein the way the passivation layer is disposed is selected from at least one of sputtering by chemical vapor deposition (CVD), plasma-enhanced CVD, evaporation, spin-coating, meniscus and roller-coating; such that a surface potential difference between the assembly formed thereby and a second assembly of said liquid crystal display device, is adjusted.

12. A liquid crystal display device, as in claim 11, wherein the passivation layer is selected and disposed on at least one of said upper electrode and said lower electrode to form the second assembly.

13. A liquid crystal display device, as in claim 1, wherein materials for said alignment layer are selected and disposed on at least one of said upper electrode and said lower electrode to form an assembly wherein a surface potential of the assembly is altered, such that a surface potential difference between the lower assembly and the upper assembly is adjusted and the intrinsic DC offset potential in said liquid crystal display device is changed.

14. A liquid crystal display device, as in claim 13, wherein the surface potential of the assembly formed thereby is altered, resulting in a decrease in the surface potential.

15. A liquid crystal display device, as in claim 13, wherein the surface potential of the assembly formed thereby is altered, resulting in an increase in the surface potential.

16. A liquid crystal display device, as in claim 13, wherein the materials selected for said alignment layer disposed on the lower assembly are different.

17. A liquid crystal display device, as in claim 13, wherein the materials selected for said alignment layer disposed on the upper assembly are different.

18. A liquid crystal display device, as in claim 1, wherein said alignment layer is treated such that a surface potential difference between the lower assembly and the upper assembly, of said liquid crystal display device, is adjusted.

19. A method, as in claim 18, wherein said alignment layer is treated by doping with an ionic salt, whereby the surface potential difference is changed.

20. A liquid crystal display device, comprising:
an upper electrode;
a lower electrode;
alignment layers in contact with at least one of said upper electrode or said lower electrode to form an upper assembly and a lower assembly; and
a liquid crystal display material, disposed between the upper assembly and the lower assembly;
wherein the upper assembly and the lower assembly are designed relative to each other to create a substantially predetermined surface potential difference between the upper assembly and the lower assembly;
such that an intrinsic DC offset potential in said liquid crystal display device is within a designed range.

CLAIMS 21-46 ARE CANCELED.